

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-69 (Cancelled)

70. (New) An appliance for providing an IP address associated with a host in a computer network, including:

a processor configured to run an operating system that is optimized to provide a network name-related functionality, including by omitting from the operating system at least one software component that is not required to provide the network name-related functionality but that would be required to be included in the operating system if the processor were to be configured or configurable to be used to perform a task not required to be performed to provide the network name-related functionality; and

a communication interface for providing the IP address.

71. (New) An appliance as recited in claim 70, wherein the operating system is derived from a full operating system that includes the at least one software component.

72. (New) An appliance as recited in claim 70, wherein the at least one software component includes one of the following: a driver or a utility software.

73. (New) An appliance as recited in claim 70, wherein the appliance excludes a hardware component that typically is included in a host computing system but that is not required to provide the network name-related functionality.

74. (New) An appliance as recited in claim 70, wherein the appliance excludes a communication port that typically is included in a host computing system but that is not required to provide network name-related functionality.

75. (New) An appliance as recited in claim 70, wherein the network name-related functionality comprises the Domain Name Service (DNS) and the IP address comprises a requested IP address associated with a host identified in a DNS request received at the appliance.

76. (New) An appliance as recited in claim 70, wherein the network name-related functionality comprises the Dynamic Host Configuration Protocol (DHCP) service and the IP address comprises an assigned IP address assigned dynamically to a requesting host in response to a received DHCP request.

77. (New) An appliance as recited in claim 70, wherein the processor is further configured to:

receive a request for an IP address associated with a domain name from a client in a computer network;

retrieve the requested IP address from a database; and

transmit the retrieved IP address to the client.

78. (New) An appliance as recited in claim 70, further including a database for storing DNS information.

79. (New) An appliance as recited in claim 70, further including an object oriented database for storing DNS information.

80. (New) An appliance as recited in claim 70, wherein the processor is further configured to link a host object with a network object and a zone object.

81. (New) An appliance as recited in claim 80, wherein the zone object is linked to another zone object.
82. (New) An appliance as recited in claim 80, wherein the network object is linked to another network object.
83. (New) An appliance as recited in claim 70, wherein the processor is further configured to:
- unlink an old network object from a host object;
 - delete the old network object; and
 - link the host object to a new network object.
84. (New) An appliance as recited in claim 83, wherein the processor is further configured to automatically update the host object to reflect an association with the new network object.
85. (New) An appliance as recited in claim 70, wherein the appliance is further configured to provide an interface for configuring the appliance.
86. (New) An appliance as recited in claim 70, wherein the appliance is further configured to provide a web interface for configuring the appliance from a client web browser.
87. (New) An appliance as recited in claim 70, wherein the appliance is further configured to provide an interface for configuring DNS and/or DHCP information on the appliance.
88. (New) An appliance as recited in claim 70, further including a web server configured to provide an interface for configuring the appliance.
89. (New) An appliance as recited in claim 70, further including a configuration server.
90. (New) An appliance as recited in claim 70, wherein the interface includes a graphical user interface (GUI).

91. (New) An appliance as recited in claim 70, wherein the computer network includes the Internet, and IP based computer network, or an intranet.

92. (New) A method of providing an IP address associated with a host in a computer network, including:

providing an operating system that is optimized to provide a network name-related functionality, including by omitting from the operating system at least one software component that is not required to provide the network name-related functionality but that would be required to be included in the operating system if the processor were to be configured or configurable to be used to perform a task not required to be performed to provide the network name-related functionality; and

providing the IP address.

93. (New) A method as recited in claim 92, wherein the operating system is derived from a full operating system that includes the at least one software component.

94. (New) A method as recited in claim 92, wherein the at least one software component includes one of the following: a driver or a utility software.

95. (New) A method as recited in claim 92, wherein the appliance excludes a hardware component that typically is included in a host computing system but that is not required to provide the network name-related functionality.

96. (New) A method as recited in claim 92, wherein the appliance excludes a communication port that typically is included in a host computing system but that is not required to provide network name-related functionality.

97. (New) A method as recited in claim 92, wherein the network name-related functionality comprises the Domain Name Service (DNS) and the IP address comprises a requested IP address associated with a host identified in a DNS request received at the appliance.

98. (New) A method as recited in claim 92, wherein the network name-related functionality comprises the Dynamic Host Configuration Protocol (DHCP) service and the IP address comprises an assigned IP address assigned dynamically to a requesting host in response to a received DHCP request.

99. (New) A method as recited in claim 92, further including:

receiving a request for an IP address associated with a domain name from a client in a computer network;

retrieving the requested IP address from a database; and
transmitting the retrieved IP address to the client.

100. (New) A method as recited in claim 92, further including providing a database for storing DNS information.

101. (New) A method as recited in claim 92, further including providing an object oriented database for storing DNS information.

102. (New) A method as recited in claim 92, further including linking a host object with a network object and a zone object.

103. (New) An appliance as recited in claim 102, wherein the zone object is linked to another zone object.

104. (New) An appliance as recited in claim 102, wherein the network object is linked to another network object.

105. (New) A method as recited in claim 92, further including:

unlinking an old network object from a host object;
deleting the old network object; and
linking the host object to a new network object.

106. (New) An appliance as recited in claim 105, further including automatically updating the host object to reflect an association with the new network object.
107. (New) A method as recited in claim 92, further including providing an interface for configuring the appliance.
108. (New) A method as recited in claim 92, further including providing a web interface for configuring the appliance from a client web browser.
109. (New) A method as recited in claim 92, further including providing an interface for configuring DNS and/or DHCP information on the appliance.
110. (New) A method as recited in claim 92, further including providing a web server configured to provide an interface for configuring the appliance.
111. (New) A method as recited in claim 92, further including providing a configuration server.
112. (New) A method as recited in claim 92, wherein the interface includes a graphical user interface (GUI).
113. (New) A method as recited in claim 92, wherein the computer network includes the Internet, and IP based computer network, or an intranet.
114. (New) A computer program product for providing an IP address associated with a host in a computer network, the computer program product being embodied in a computer readable medium and comprising computer instructions for:

providing an operating system that is optimized to provide a network name-related functionality, including by omitting from the operating system at least one software component that is not required to provide the network name-related functionality but that would

be required to be included in the operating system if the processor were to be configured or configurable to be used to perform a task not required to be performed to provide the network name-related functionality; and

providing the IP address.

- 115. (New) A computer program product as recited in claim 114, wherein the operating system is derived from a full operating system that includes the at least one software component.
- 116. (New) A computer program product as recited in claim 114, wherein the at least one software component includes one of the following: a driver or a utility software.
- 117. (New) A computer program product as recited in claim 114, wherein the appliance excludes a hardware component that typically is included in a host computing system but that is not required to provide the network name-related functionality.
- 118. (New) A computer program product as recited in claim 114, wherein the appliance excludes a communication port that typically is included in a host computing system but that is not required to provide network name-related functionality.
- 119. (New) A computer program product as recited in claim 114, wherein the network name-related functionality comprises the Domain Name Service (DNS) and the IP address comprises a requested IP address associated with a host identified in a DNS request received at the appliance.
- 120. (New) A computer program product as recited in claim 114, wherein the network name-related functionality comprises the Dynamic Host Configuration Protocol (DHCP) service and the IP address comprises an assigned IP address assigned dynamically to a requesting host in response to a received DHCP request.
- 121. (New) A computer program product as recited in claim 114, the computer program product further comprising computer instructions for:

receiving a request for an IP address associated with a domain name from a client in a computer network;

retrieving the requested IP address from a database; and

transmitting the retrieved IP address to the client.

122. (New) A computer program product as recited in claim 114, the computer program product further comprising computer instructions for providing a database for storing DNS information.
123. (New) A computer program product as recited in claim 114, the computer program product further comprising computer instructions for providing an object oriented database for storing DNS information.
124. (New) A computer program product as recited in claim 114, the computer program product further comprising computer instructions for linking a host object with a network object and a zone object.
125. (New) An appliance as recited in claim 124, wherein the zone object is linked to another zone object.
126. (New) An appliance as recited in claim 124, wherein the network object is linked to another network object.
127. (New) A computer program product as recited in claim 114, the computer program product further comprising computer instructions for:
- unlinking an old network object from a host object;
 - deleting the old network object; and
 - linking the host object to a new network object.
128. (New) An appliance as recited in claim 127, the computer program product further comprising computer instructions for automatically updating the host object to reflect an association with the new network object.

129. (New) A computer program product as recited in claim 114, the computer program product further comprising computer instructions for providing an interface for configuring the appliance.
130. (New) A computer program product as recited in claim 114, the computer program product further comprising computer instructions for providing a web interface for configuring the appliance from a client web browser.
131. (New) A computer program product as recited in claim 114, the computer program product further comprising computer instructions for providing an interface for configuring DNS and/or DHCP information on the appliance.
132. (New) A computer program product as recited in claim 114, the computer program product further comprising computer instructions for providing a web server configured to provide an interface for configuring the appliance.
133. (New) A computer program product as recited in claim 114, the computer program product further comprising computer instructions for providing a configuration server.
134. (New) A computer program product as recited in claim 114, wherein the interface includes a graphical user interface (GUI).
135. (New) A computer program product as recited in claim 114, wherein the computer network includes the Internet, and IP based computer network, or an intranet.